

**In the claims:**

Claims 1 to 26 (canceled)

27. (currently amended) The method according to Claim 31 wherein said step of providing an added conductive region layer is selected from a group consisting at least in part of sputtering, evaporating, and plating.

28. (currently amended ) The method according to Claim 31 wherein said step of fabricating a planar outer surface of said added conductive region layer comprises the step of depositing a second of said at least one added conductive layer by electroless plating.

29. (currently amended) The method according to Claim 31 wherein said step of fabricating a planar outer surface of said added conductive region layer comprises the step of depositing a second of said at least one added conductive layer by screen printing.

30. (currently amended) The method according to Claim 31 wherein said step of fabricating a planar outer surface of said added conductive region layer comprises the step of depositing a second of said at least one added conductive layer by using the method of support by islands of protective overcoat.

31. (currently amended) A method for fabricating a semiconductor assembly comprising the steps of:

providing a semiconductor chip having a planar active surface including an integrated circuit, said integrated circuit having metallization patterns including a plurality of contact pads at said planar active surface,

providing a protective overcoat over said planar active surface, said protective overcoat including windows exposing said plurality of contact pads, said windows having sidewalls;

providing an added conductive region having at least one conductive layer on said metallization pattern covering and conformal to each of said contact pads, said sidewalls of said windows and a portion of said protective overcoat surrounding said windows, said added conductive region layer having a planar outer surface, said outer surface of said added outer conductive region layer suitable to form metallurgical bonds without melting;

providing an assembly board having a plurality of planar, metallurgically bondable terminal pads in a distribution aligned with the distribution of said contact pads;

aligning said added metallization and said board pads so that each of said contact pads are connected to a corresponding board terminal pad; and

metallurgically bonding said chip metallization and said board pads without melting said outer surface of said added conductive region layer.

32. (previously presented) The method according to Claim 31 wherein said bonding comprises one of the following assembly techniques:

direct welding by metallic interdiffusion;

attaching including solder paste;

attaching including a conductive adhesive.